

CAVERNOUS SINUS TRIANGLES: VIEW TROUGH ENDOSCOPIC TRANSNASAL APPROACH: AN ANATOMICAL STUDY

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Since the pioneering work of Parkinson several studies have described the microsurgical anatomy and surgical procedures involved the cavernous sinus (CS). However, authors differ in naming and describing some of these triangular spaces. Objectives: The purpose of this study is to present the endoscopic transnasal view anatomy triangles in and around this region. Methods - Five formalin central skull base blocs (10 Cavernous sinus) were dissected by the endoscopic transnasal approach. Endoscopic dissections were performed without any skin incision, following the same minimally invasive principles of the technique used in patients. Rigid endoscopes (Karl Storz GmbH and Co., Tuttlingen, Germany), 4 mm in diameter, 18 cm in length, with 0- and 30-degree lenses, were used, according to the different steps of the anatomic dissection. The endoscope was connected to a light source through a fiberoptic cable and to a camera. The videocamera was connected to a 21-inch monitor supporting the high resolution of the charge coupled device technology. Result: Through the endoscopic transnasal approach, it is not possible to explore all parasellar and middle cranial fossa triangles, but the medial and inferior wall of the CS are easily reached with this approach We compare our results with the cranial view of these triangles via craniotomy. Conclusion: Different surgical corridors can be defined during the endoscopic transnasal approach to the anteroinferior portion of the cavernous sinus. We believe that transnasal endoscopy to the cavernous sinus is a suitable approach to tumors invading this region, principally those placed medially to the intracavernous carotid artery, such as pituitary adenomas and chordomas.